

IN THE CLAIMS

Please amend the currently pending claims as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

determining ~~with a BIOS~~, a ~~maximum~~ sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, ~~wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;~~

translating the ~~maximum~~ sustainable power level into a ~~maximum~~ performance characteristic data transfer rate; and

adjusting operation of the integrated circuit such that the ~~maximum~~ data transfer rate performance characteristic is not exceeded.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the environmental system characteristics are stored within the BIOS.

4. (Cancelled)

5. (Previously Presented) The method of claim 1, wherein the design characteristics are stored within the integrated circuit.

6. (Original) The method of claim 1, wherein the integrated circuit comprises a memory module.

7. (Original) The method of claim 6, wherein the memory module comprises a RDRAM memory module.

8. (Cancelled)

9. (Currently Amended) The method of claim 18, wherein adjusting operation of the integrated circuit further comprises:

monitoring an amount of data transferred to and/or from the integrated circuit; and

reducing the amount of data transferred if the amount of data transferred results in a data transfer rate that exceeds the maximum allowable data transfer rate.

10. (Currently Amended) The method of claim 18, wherein adjusting operation of the integrated circuit further comprises determining an amount of time for which the ~~maximum allowable~~ data transfer rate can ~~may~~ be sustained.

11. (Currently Amended) A apparatus comprising:

~~first circuitry to:~~

~~a unit to determine with a BIOS, a maximum sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;~~

~~a unit to translate the maximum sustainable power level into a maximum performance characteristic data transfer rate; and~~

~~a unit to adjust operation of the integrated circuit such that the maximum data transfer rate performance characteristic is not exceeded.~~

12. (Previously Presented) The apparatus of claim 11, wherein design characteristics stored within the integrated circuit.

13. (Previously Presented) The apparatus of claim 11, wherein the environmental system characteristics further include active, idle, and standby power consumption levels stored within the integrated circuit.

14. (Original) The apparatus of claim 11, wherein the integrated circuit comprises a memory module.

15. (Currently Amended) A system comprising:

a RDRAM memory module ~~an integrated circuit; and~~

a ~~BIOS coupled to the integrated circuit to:~~

a unit to determine a ~~maximum~~ sustainable power level for the integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, ~~wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;~~

a unit to translate the ~~maximum~~ sustainable power level into a ~~maximum~~ performance characteristic data transfer rate; and

a unit to adjust operation of the integrated circuit such that the ~~maximum~~ data transfer rate performance characteristic is not exceeded.

16. (Previously Presented) The system of claim 15, wherein the integrated circuit comprises a memory module having at least a portion of the environmental system characteristics stored thereon.

17. (Previously Presented) The system of claim 15, wherein the environmental system characteristics further include active, idle, and standby power consumption levels stored within the integrated circuit.

18. (Original) The system of claim 15, wherein the maximum performance characteristic comprises a maximum allowable data transfer rate.

19. (Currently Amended) An article of manufacture comprising a machine readable medium having a plurality of machine readable instructions stored thereon, wherein the instructions, when executed by a processor, cause the processor to:

determine ~~with a BIOS~~, a ~~maximum~~ sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit, ~~wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;~~

translate the ~~maximum~~ sustainable power level into a ~~maximum allowable~~ data transfer rate; and

adjust operation of the integrated circuit such that the ~~maximum allowable~~ data transfer rate is not exceeded.

20. (Original) The article of manufacture of claim 19, further comprising instructions that, when executed by a processor, cause the processor to adjust operation of the integrated circuit by determining an amount of time for which the maximum allowable data transfer rate may be sustained.

21. (New) The method of claim 1, wherein said determining is performed by a BIOS.

22. (New) The method of claim 1, wherein the design characteristics are stored on a serial presence detect (SPD) device.

23. (New) The method of claim 22, wherein the SPD is on the integrated circuit.

24. (New) A system comprising:

a RDRAM memory module; and

a machine readable medium having a plurality of machine readable instructions stored thereon, wherein the instructions, when executed by a processor, cause the processor to:

determine a sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit;

translate the sustainable power level into a data transfer rate; and
adjust operation of the integrated circuit such that the data transfer rate is not exceeded.

25. (New) An apparatus comprising:

means for determining a sustainable power level for an integrated circuit based upon environmental system thermal characteristics and design characteristics of the integrated circuit;

means for translating the sustainable power level into a data transfer rate; and
means for adjusting operation of the integrated circuit such that the data transfer rate is not exceeded.